

Title (en)
PLASMA IRRADIATION TREATMENT DEVICE

Title (de)
VORRICHTUNG FÜR BEHANDLUNGEN DURCH PLASMABESTRAHLUNG

Title (fr)
DISPOSITIF DE TRAITEMENT PAR IRRADIATION PLASMA

Publication
EP 2591742 A1 20130515 (EN)

Application
EP 11803467 A 20110627

Priority
• JP 2010154948 A 20100707
• JP 2011064661 W 20110627

Abstract (en)
A plasma treatment equipment free from a risk of generation of discharge on an object to be treated, capable of starting of plasma generation easily and reliably and maintaining the state of a mild plasma jet stably without any fluctuations is provided A plasma treatment equipment including: a plasma starting and stabilizing unit (A) having an insulating material such as a dielectric material having an elongated hole connecting to a plasma ejection portion, a triggering and discharge-stabilizing electrode, and an intense electric field electrode mounted thereon; and a plasma generating unit (B) including the insulating material having the elongated hole and a plasma generating electrode configured to perform main plasma generation at the time of operation, wherein the triggering and discharge-stabilizing electrode, the intense electric field electrode, and the plasma generating electrode are provided in such a manner that all the electrodes are not exposed and covered with the dielectric material for the entire space of one or more of the elongated hole which allows passage of gas from the upstream, starting of the plasma and generation of the plasma, and ejection of the plasma jet.

IPC 8 full level
A61B 18/00 (2006.01); **H05H 1/24** (2006.01)

CPC (source: EP US)
A61B 18/042 (2013.01 - EP US); **H05H 1/2406** (2013.01 - EP US); **H05H 1/245** (2021.05 - EP); **A61B 2018/00589** (2013.01 - EP US); **A61B 2018/00982** (2013.01 - EP US); **H05H 1/245** (2021.05 - US)

Cited by
CN105357854A; CN113287372A; EP3613371A4; EP3919013A1; EP3919012A1

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